

REQUEST FOR INTERFERENCE

Pursuant to 37 C.F.R. §1.607, applicants request the Examiner to declare an interference between the present application and unexpired U. S. Patent 6,889,401. The following information is submitted under 37 C.F.R. §1.607 and 37 C.F.R. §1.608 to support the requested interference.

(1) Identification Of Patent

Applicants have copied Claims 1, 2 and 4-6 from U. S. Patent 6,889,401, issued May 10, 2005, to provoke an interference with this patent. The claims copied from U. S. Patent 6,889,401 appear as Claims 8-12 in the present application.

(2) Presentation Of Proposed Count

Applicants present the following proposed interference count which corresponds to Claim 1 of U. S. Patent 6,888,401 and to Claim 8 of the present application.

A powered toothbrush comprising

- (1) a handle with a neck,
- (2) a head mounted to said neck, said head having an exposed outer surface,
- (3) a first tuft block mounted to a fixed section of said head, said first tuft block having bristles extending outwardly from said exposed outer surface,
- (4) a first drive structure operatively connected to said first tuft block for moving said first tuft block in a plane generally parallel to said exposed outer surface,
- (5) a second tuft block mounted within said fixed section of said head, at least a portion of said second tuft block being aligned with an opening in said exposed outer surface,
- (6) said second tuft block having bristles extending outwardly from said exposed outer surface, and
- (7) said second tuft block being mounted for moving in a direction generally perpendicular to said exposed outer surface within said opening.

(3) Patent Claim Corresponding To Count

Claim 1 of U. S. Patent 6,889,401 is identical to and corresponds exactly to the interference count. Dependent Claims 2-22 of U. S. Patent 6,889,401 also correspond to the count.

(4) Application Claim Corresponding To Count

Claim 8 of the present application is identical to and corresponds exactly to the interference count. Dependent Claims 9-12 of the present application also correspond to the count.

(5) Applying Application Claims To Disclosure

The support for Claims 8-12 in the Depuydt disclosure is explained in detail below. A Declaration of Joseph A. Depuydt is submitted herewith to demonstrate how Claims 8-12 are supported by the specification and drawings filed in this application. A copy of Application No. 10/697,206 including the original specification and drawings is identified as Exhibit 9 in the Depuydt declaration. The following analysis of Claims 8-12 includes references to the paragraphs of the Depuydt declaration where the support for the claim limitations is explained.

Claim 8 - Preamble

The preamble of Claim 8 recites a "powered toothbrush" which is supported by the Depuydt disclosure as follows.

In the Summary Of The Invention (page 2, lines 4-5), the invention is described as "a head for an electric toothbrush". In the specification, at page 2, lines 17-18, FIG. 1 is described as "a side view of an electric toothbrush head attached to a brush handle/drive". The Detailed Description, at page 3, line 13, refers to "an electric toothbrush head 10". The term "electric toothbrush" used in the specification refers to an electrically powered toothbrush. [Depuydt ¶46]

Claim 8 - Limitation (1)

Claim 8 recites "a handle with a neck". The handle and neck are described in the disclosure as follows.

In the specification, FIG. 1 is described as "a side view of an electric toothbrush head attached to a brush handle/drive"

(page 2, lines 17-18). At page 3, lines 13-14, it is disclosed that "an electric toothbrush head 10 includes a neck 12". The neck 12 is shown in FIG. 1 of the drawings. [Depuydt ¶47]

Claim 8 - Limitation (2)

Claim 8 recites "a head mounted to said neck, said head having an exposed outer surface". This limitation is supported by the Depuydt disclosure as follows.

The "head mounted to said neck" of Claim 8 is satisfied by the neck 12 and bristle support 14 of FIGS. 1-2. The bristle support 14 corresponds to the "head" and the neck 12 corresponds to the "neck" of Claim 8. At page 3, lines 13-14, it is disclosed that "an electric toothbrush head 10 includes a neck 12 which is connected to the bristle support 14". At page 3, line 19, it is disclosed that "FIG. 2 shows support 14 in an exploded side view". One of the components of the bristle support 14 is a brush base 24 with a flat top surface shown in FIG. 2 which corresponds to the "exposed outer surface" of Claim 8. [Depuydt ¶48]

Claim 8 - Limitation (3)

Claim 8 recites the following limitation:

"a first tuft block mounted to a fixed section of said head, said first tuft block having bristles extending outwardly from said exposed outer surface".

The brush base 24 of the Depuydt disclosure (page 3, line 29) corresponds to the "first tuft block" of Claim 8. The brush base 24 is mounted in a housing 34 (page 3, lines 32-33) which is shown as fixed to the distal end of the neck 12. The housing 34 corresponds to the "fixed section of said head" of Claim 8. The brush base 24 includes bristles 16 shown in FIG. 2 which extend outwardly from the top surface of the brush base 24 of the bristle support 14. [Depuydt ¶49]

Claim 8 - Limitation (4)

Claim 8 recites the following limitation:

"a first drive structure operatively connected to said first tuft block for moving said first tuft block in a plane

generally parallel to said exposed outer surface".

The operation of the bristle support 14 is disclosed at page 3, line 35, to page 4, line 11. The specification states that the pin 36 is oscillated about its axis by a drive mechanism (not shown) in neck 12. The drive mechanism can be of conventional design. Oscillation of the pin 36 causes the brush base 24 and bristles 16 to oscillate in a rotary pattern (page 4, line 3). The brush base 24 oscillates in a plane generally parallel to its top surface. Thus, the drive mechanism which oscillates the brush base 24 satisfies the requirement of Claim 8 of a drive structure for moving the first tuft block in a plane generally parallel to the exposed outer surface. [Depuydt ¶50]

Claim 8 - Limitation (5)

Claim 8 recites the following limitation:

"a second tuft block mounted within said fixed section of said head, at least a portion of said second tuft block being aligned with an opening in said exposed outer surface".

The slider core 20 of the Depuydt disclosure (page 3, line 20) corresponds to the "second tuft block" of Claim 8. The slider core 20 is positioned inside a brush base 24 mounted in a housing 34 of the bristle support 14. The housing 34 corresponds to the "fixed section of said head" of Claim 8. As shown in FIG. 2, the slider core 20 is aligned with an opening shown by phantom lines in the top surface of the brush base 24 to satisfy the limitation of Claim 8 that the second tuft block is aligned with an opening in the exposed outer surface. [Depuydt ¶51]

Claim 8 - Limitation (6)

Claim 8 recites the following limitation:

"said second tuft block having bristles extending outwardly from said exposed outer surface".

The slider core 20 of the Depuydt disclosure includes a probe 18 which can be "a single large bristle or a tuft of smaller bristles" (page 3, lines 19-22). The probe or bristles 18 extend outwardly from the top surface of the brush base 24 to satisfy the

limitation of Claim 8 that the bristles extend outwardly from the exposed outer surface. [Depuydt ¶52]

Claim 8 - Limitation (7)

Claim 8 recites the following limitation:

"said second tuft block being mounted for moving in a direction generally perpendicular to said exposed outer surface within said opening".

The slider core 20 of the Depuydt disclosure is mounted for movement in a direction perpendicular to the top surface of the brush base 24. The slider core 20 moves up and down relative to the bristles 16 during oscillation of the brush base 24 (page 4, lines 6-9). FIGS. 3A-3B show that the slider core 20 moves up and down in the opening in the brush base 24. The up and down movement of the slider core 20 satisfies the limitation of Claim 8 that the second tuft block (core 20) is mounted for moving in a direction generally parallel to the exposed outer surface within the opening. [Depuydt ¶53]

Dependent Claim 9

Claim 9 is dependent on Claim 8 and recites that:

"said second tuft block oscillates in an in and out direction perpendicular to said outer surface to constitute a vibrating section".

The core 20 of the Depuydt disclosure corresponds to the second tuft block. The specification at page 4, lines 4-6, states that the oscillation of the base 24 causes core 20 and probe 18 to oscillate with the base because the pins 22 ride in track 28 of the base. Pins 22 also ride in respective tracks 26 in the housing, thus causing core 20 and probe 18 to move up and down relative to bristles 16 during oscillation of brush base 24 (page 4, lines 6-11). The up and down movement of the core 20 and the probe 18 is shown in FIGS. 3A-3B. The up and down movement of the core 20 satisfies the requirement of Claim 9 that the second tuft block (core 20) oscillates in an in and out direction perpendicular to the outer surface (top surface of brush base 24) to constitute a

vibrating section. [Depuydt ¶54]

Dependent Claim 10

Claim 10 is dependent on Claim 9 and recites "second drive structure operatively connected to said second tuft block for moving said second tuft block".

The specification at page 3, lines 27-28, states that a pair of cam follower pins 22 are secured to opposite sides of the lower portion of core 20. Core 20 is positioned inside of a brush base 24 such that pins 22 are forced to ride along respective cam tracks 26 as well as respective vertical slider tracks 28 (page 3, lines 28-31). In the operation of support 14, pins 22 ride in respective tracks 26 in the housing, thus causing core 20 and probe 18 to move up and down relative to bristles 16 during oscillation of brush base 24 (page 4, lines 6-9). The pins 22 and tracks 26 correspond to the second drive structure of Claim 10 operatively connected to the second tuft block (core 20) for moving the second tuft block. [Depuydt ¶55]

Dependent Claim 11

Claim 11 is dependent on Claim 9 and recites that "said first tuft block is moved back and forth in an oscillating manner".

The brush base 24 corresponds to the first tuft block. The specification at page 3, line 36, to page 4, line 1, states that the pin 36 is oscillated about its long axis by a drive mechanism (not shown) in neck 12. Oscillation of pin 36 causes brush base 24 and bristles 16 to oscillate in a rotary pattern (page 4, lines 2-3). Thus, the first tuft block (brush base 24) is moved back and forth in an oscillating manner to satisfy the requirements of Claim 11. [Depuydt ¶56]

Dependent Claim 12

Claim 12 is dependent on Claim 11 and recites that "said first tuft block is oscillated in a rotational direction".

The specification states that pin 36 is oscillated about its long axis by a drive mechanism (not shown) in neck 12 (page 3, line 36, to page 4, line 1). Oscillation of pin 36 causes brush

base 24 and bristles 16 to oscillate in a rotary pattern (page 4, lines 2-3). Thus, the first tuft block (brush base 24) is oscillated in a rotational direction to satisfy the requirements of Claim 12. [Depuydt ¶57]

(6) Requirements Of 35 USC §135(b) Satisfied

Claims 8-12 are copied from U. S. Patent 6,889,401 and presented in this application less than one (1) year from the May 10, 2005 issue date of the patent. Claims 8-12 are not the same or substantially the same as any claim of the published application No. 2003/0182744 (Exhibit 18) dated October 2, 2003. Accordingly, the requirements of 35 USC §135(b) are satisfied.

(7) Prima Facie Case Under 37 CFR §1.608

Pursuant to 37 C.F.R. §1.608, the following declarations and exhibits are submitted by applicants as evidence of a prima facie case in support of the request for interference.

Declarations

- (1) Declaration of Joseph A. Depuydt
- (2) Declaration of David Howley
- (3) Declaration of Gordon Guay

Exhibits

- 1 Specification, Claims & Drawings
Application No. 09/425,423
Filed Oct. 22, 1999
- 2 Declaration And Power Of Attorney
In Application No. 09/425,423
- 3 Transmittal Paper To USPTO For
Application No. 09/425,423
- 4 USPTO Filing Receipt For
Application No. 09/425,423
- 5 Specification, Claims & Drawings
Application No. 10/456,769
Filed June 6, 2003
- 6 Declaration And Power Of Attorney
In Application No. 10/456,769

- 7 Transmittal Paper To USPTO For
Application No. 10/456,769
- 8 USPTO Filing Receipt For
Application No. 10/456,769
- 9 Specification, Claims & Drawings
Application No. 10/697,206
Filed Oct. 30, 2003
- 10 Declaration And Power Of Attorney
In Application No. 10/697,206
- 11 Transmittal Paper To USPTO For
Application No. 10/697,206
- 12 USPTO Filing Receipt For
Application No. 10/697,206
- 13 U. S. Patent 6,574,820 issued
in Application No. 09/425,423
- 14 U. S. Patent 6,760,946 issued
in Application No. 10/456,769
- 15 U. S. Patent 6,889,401
- 16 Depuydt Notebook Pages
Interdental Toothbrush
- 17 Inter-Dental Brush Head
J. Depuydt (Pages 1-2)
- 18 U. S. Publication
No. 2003/0182744

Statement Of Facts

The evidence submitted by applicants establishes the following facts:

(1) The present Application No. 10/697,206 was filed in the USPTO on October 30, 2003, as a continuation of Application No. 10/456,769, filed June 6, 2003. The Application No. 10/697,206, as filed, included references to Application No. 10/456,769, filed June 6, 2003, and to Application No. 09/425,423, filed October 22, 1999. The transmittal paper included a claim for priority under 35 U.S.C. §120. [Howley ¶12-15, Exhibits 9-12]

(2) Application No. 10/456,769 was filed in the USPTO on June 6, 2003, as a continuation of Application No. 10/425,423, filed October 22, 1999. The Application No. 10/456,769, as filed, included a reference to Application No. 09/425,423, filed October 22, 1999. The combined declaration and the transmittal paper included a claim for priority under 35 U.S.C. §120. [Howley ¶8-11, Exhibits 5-8]

(3) Application No. 10/425,423 was filed in the USPTO on October 22, 1999. [Howley ¶4-7, Exhibits 1-4]

(4) Application No. 09/425,423 was issued on June 10, 2003 as U. S. Patent 6,574,820. [Exhibit 13]

(5) Application No. 10/456,769 was issued on July 13, 2004 as U. S. Patent 6,760,946. [Exhibit 14]

(6) Fattori U. S. Patent 6,889,401 was filed on March 26, 2002 as Application No. 10/107,093 and was issued on May 10, 2005. [Exhibit 15]

(7) All limitations of Claim 8, which is identical to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 10/697,206. [Depuydt ¶44-53, Exhibit 9]

(8) All limitations of Claims 9-12, which correspond to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 10/697,206. [Depuydt ¶54-57, Exhibit 9]

(9) All limitations of Claim 8, which is identical to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 10/456,769. [Depuydt ¶30-39, Exhibit 5]

(10) All limitations of Claims 9-12, which correspond to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 10/456,769. [Depuydt ¶40-43, Exhibit 5]

(11) All limitations of Claim 8, which is identical to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 09/425,423. [Depuydt ¶16-25, Exhibit 1]

(12) All limitations of Claims 9-12, which correspond to the proposed interference count, are supported by the disclosure relating to the first embodiment of the invention in Application No. 09/425,423. [Depuydt ¶26-29, Exhibit 1]

(13) Joseph A. Depuydt is the inventor of the first embodiment shown in Figures 1, 2, 3A and 3B and described in the specification of Application No. 09/425,423 (Exhibit 1). The same embodiment is disclosed in Application No. 10/456,769 (Exhibit 5) and Application No. 10/697,206 (Exhibit 9). [Depuydt ¶10]

(14) The first embodiment of the invention disclosed in Application No. 09/425,423 was conceived by Mr. Depuydt at least as early as October 17, 1997. [Depuydt ¶11, Exhibit 16]

(15) The first embodiment of the invention disclosed in Application No. 09/425,423 was reduced to practice by Mr. Depuydt by constructing a prototype of the brush head at least as early as January 1998. [Depuydt ¶13, Exhibit 17]

(16) The invention conceived by Mr. Depuydt relates to a dual motion brush head intended for use on a power handle of an electric toothbrush. The brush head included a rotary brush capable of oscillating motion about its axis and a slidable core with one or more fibers capable of reciprocating motion relative to the rotary brush. [Depuydt ¶58, Exhibit 16, Guay ¶6]

(17) The brush head conceived by Mr. Depuydt satisfies all limitations of Claim 8 of Application No. 10/697,206 which is identical to the proposed interference count. [Depuydt ¶59-66, Exhibit 16]

(18) The prototype of the brush head constructed by Mr. Depuydt at least as early as January 1998 was a dual motion brush head for an electric toothbrush. The prototype of the brush head included a rotary brush capable of oscillating motion about its axis and a slidable core with one or more fibers capable of reciprocating motion relative to the rotary brush. The prototype of the brush head also included a drive attachment in the base of the rotary brush for receiving an oscillating T-bar at the distal end of the drive linkage for imparting rotary oscillation to the rotary head. [Depuydt ¶67-68, Exhibits 16-17, Guay ¶7]

(19) In January 1998, Mr. Depuydt tested the prototype by attaching the neck of the toothbrush head to a power handle of a conventional electric toothbrush. He turned on the power handle to oscillate the output shaft and the T-bar at the distal end of the drive linkage which resulted in the rotary oscillation of the brush head and vertical reciprocation of the slider core and probe. Mr. Depuydt demonstrated the operation of the prototype to Mr. Guay and to other Gillette employees. [Depuydt ¶69 & 71, Guay ¶8, and Exhibit 17]

(20) The prototype of the brush head constructed by Mr. Depuydt at least as early as January 1998 satisfies all limitations of Claim 8 of Application No. 10/697,206 which is identical to the proposed interference count. [Depuydt ¶72-79, Exhibit 17]

Prima Facie Case - Earlier Filing Date

The evidence submitted by applicants establishes that the present application No. 10/697,206 was filed on October 30, 2003. The present application is a continuation of Application No. 10/456,769, filed on June 6, 2003 (U. S. Patent 6,760,946), which in turn is a continuation of Application No. 09/425,423, filed on October 22, 1999 (U. S. Patent 6,574,820). Under 35 U.S.C. §120,

the present application No. 10/697,206 is entitled to the benefit of the filing dates of the earlier applications.

The evidence also shows that all limitations of Claim 8, which is identical to the interference count, are supported by the disclosure of the first embodiment of the invention in Application No. 10/697,206. Further, all limitations of Claim 8 are supported by the earlier Application Nos. 10/456,769 and 09/425,423 which disclose the same embodiment of the invention. In addition, all limitations of dependent Claims 9-12 are supported by each of the applications.

Based on this evidence, the present application No. 10/697,206, filed October 30, 2003, has an effective filing date of October 22, 1999. This effective filing date is prior to the filing date of Fattori U. S. Patent 6,889,401 which was filed as Application No. 10/107,093 on March 26, 2002.

In an interference, applicants will be entitled to the benefit of the earlier effective filing date of October 22, 1999 of Application No. 09/425,523. Applicants should also be granted to the status of senior party in the interference.

The filing of Application No. 09/425,423 by applicants constitutes a constructive reduction to practice of all embodiments of the invention disclosed in the application. Unless Fattori is able to establish a date of invention prior to October 22, 1999, the effective filing date of Application No. 10/697,206, this date will be the basis for a judgement for applicants on the issue of priority in the interference. Thus, the evidence submitted by applicants is sufficient to establish a prima facie case under 37 C.F.R. §1.608 for an award of priority to applicants.

Prima Facie Case - Earlier Invention Date

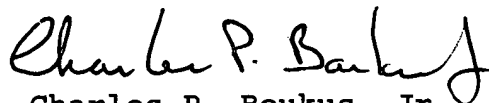
The evidence submitted by applicants establishes that the first embodiment of the invention which is disclosed in Application No. 10/697,206, and in the earlier applications, was conceived by Mr. Depuydt at least as early as October 17, 1997. The evidence also establishes that the first embodiment of the invention was

actually reduced to practice by Mr. Depuydt at least as early as January 1998. Both the conception and the reduction to practice by Mr. Depuydt occurred prior to the March 26, 2002 filing date of Application No. 10/107,093 which issued as U. S. Patent 6,889,401.

In the event that Fattori is unable to establish a date of conception prior to October 17, 1997 or an actual reduction to practice prior to January 1998, applicants will be entitled to an award of priority in the interference. The evidence submitted by applicants shows that Mr. Depuydt conceived and made his invention prior to the March 26, 2002 filing date of Fattori U. S. Patent 6,889,401. This evidence is sufficient to establish a prima facie case under 37 C.F.R. §1.608 for an award of priority to applicants.

Accordingly, applicants request that an interference be declared between this application and U. S. Patent 6,889,401.

Respectfully submitted,



Charles P. Boukus, Jr.
Registration No. 24,754
Attorney for Applicants
Suite 202
2001 Jefferson Davis Highway
Arlington, Virginia 22202
(703) 415-2620

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